

**UNIVERSITY OF SWAZILAND**  
**DEPARTMENT OF GEOGRAPHY, ENVIRONMENTAL SCIENCE AND PLANNING**  
**RE-SIT EXAMINATION, JULY 2017**  
**B.A., B.Ed., B.Sc., BASS, JMC 3 (FT/PT)**

**TITLE OF PAPER: INTRODUCTION TO THE HUMAN ENVIRONMENT**

**COURSE NUMBER:       GEP112/121**

**TIME ALLOWED:         THREE (3) HOURS**

**INSTRUCTIONS:         THIS PAPER IS DIVIDED INTO TWO SECTIONS**

**SECTION A:             TECHNIQUES AND SKILLS**

- 1. ANSWER ALL QUESTIONS (COMPULSORY)**
- 2. THIS SECTION CARRIES 40 MARKS**

**SECTION B:             SHORT ANSWERS / ESSAYS**

- 1. ANSWER ANY TWO QUESTIONS**
- 2. EACH QUESTION CARRIES 30 MARKS**

**SPECIAL REQUIREMENTS: Graph paper**

**THIS QUESTION PAPER SHOULD NOT BE OPENED UNTIL PERMISSION IS GRANTED BY THE INVIGILATOR**

**GEP112/121: INTRODUCTION TO THE HUMAN ENVIRONMENT - JULY 2017****SECTION A: TECHNIQUES AND SKILLS (40 MARKS)  
COMPULSORY****QUESTION 1**

a) Define the following concepts:

- i) Three-quarters rule (2 marks)
- ii) Lorenz curve (2 marks)
- iii) Population doubling time (2 marks)
- iv) Quantitative variable (2 marks)
- v) Optimum population (2 marks)

b) Using examples, explain four scales of measurement which are used in geographical data. (12 marks)

c) Calculate the percentages of males and females in Table 1 below. (6 marks)

d) Using an appropriate graphical technique, represent the data in Table 1 below. (12 marks)  
(40 Marks)

Table 1: Age-sex population distribution of a hypothetical country

Age	In Thousands			Percentages	
	(1) Both sexes	(2) Male	(3) Female	(4) Male	(5) Female
Below 5	20,344	10,360	9,984		
5 – 9	20,697	10,538	10,159		
10 – 14	22,241	11,315	10,926		
15 – 19	25,220	12,805	12,415		
20 – 24	25,523	12,849	12,674		
25 – 29	23,626	11,801	11,825		
30 – 34	21,627	10,741	10,886		
35 – 39	18,008	8,904	9,104		
40 – 44	15,687	7,726	7,961		
45 – 49	15,094	7,393	7,701		
50 – 54	15,711	7,622	8,089		
55 – 59	15,614	7,481	8,133		
60 – 64	14,085	6,669	7,416		
65 – 69	12,781	5,902	6,879		
70 – 74	10,797	4,853	5,944		
75 – 79	8,792	3,847	4,945		
80 – 84	5,934	3,019	2,915		
85+	4,439	1,881	2,558		

Source: Hypothetical

**SECTION B: SHORT ANSWERS / ESSAYS (60 MARKS)**  
**ANSWER ANY TWO QUESTIONS**

**QUESTION 2**

Explain the Epidemiological Transition model. **(30 Marks)**

**QUESTION 3**

- a) Explain the dilemma regarding availability of non-renewable resources. (20 marks)
  - b) Explain the factors considered when estimating the size of resource reserves. (10 marks)
- (30 Marks)**

**QUESTION 4**

With reference to any towns and cities, explain how cities destroy the existing micro-climates of an environment and create new ones. **(30 Marks)**

**QUESTION 5**

Discuss the distinctive features of the population of Swaziland. **(30 Marks)**